UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

ACTION MEMORANDUM (RV1)

DATE: May 3, 2021

SUBJECT: Confirmation of Verbal Authorization for Emergency Removal Action, TechCity Superfund Site, Town of Ulster, Ulster County, New York

FROM: Don Graham, On-Scene Coordinator
Removal Action Branch
DONALD GRAHAM Digitally signed by DONALD GRAHAM
Date: 2021.04.30 08:50:01 -04'00'

THRU: Joseph D. Rotola, Chief
Removal Action Branch
JOSEPH ROTOLA Digitally signed by JOSEPH ROTOLA
Date: 2021.05.03 10:16:18 -04'00'

TO: Pat Evangelista, Director
Superfund and Emergency Management Division

Site ID: A27N

I. PURPOSE

The purpose of this Action Memorandum is to document the verbal authorization by Eric Wilson, the former Acting Division Director of the U.S. Environmental Protection Agency (EPA), Region 2, Superfund and Emergency Management Division (SEMD) to perform emergency removal activities (RV1) at the TechCity Superfund Site (Site) in the Town of Ulster, Ulster County, New York. The total funding verbally authorized on February 12, 2020, was $500,000 of which, $475,000 was for mitigation contracting.

The purpose of the removal activities was to address some of the most immediate threats posed by the Site by removing and disposing of Building 2 which was partially demolished and contained friable asbestos-containing material (ACM), and securing Building 1 and three large debris piles that also contain ACM, if necessary. The release or the threat of release of friable ACM necessitated the removal activities under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675, and Section 300.415(b) of the National Contingency Plan (NCP), 40 CFR. § 300.415(b).

The Site is not included or proposed for inclusion on the National Priorities List (NPL).

As asbestos is the primary contaminant of concern, the activities qualified as nationally significant or precedent setting, which would require concurrence from EPA's Office of Emergency Management (OEM), Office of Land and Emergency Management (OLEM), in a non-emergency situation. However, due to the emergency conditions that were identified and the determination to immediately address the

release of friable asbestos at and from the Site, concurrence was not obtained. The emergency activities completed were necessary to prevent immediate threats posed by exposed asbestos which could have resulted in a direct public health threat.

II. SITE CONDITIONS AND BACKGROUND

The Site includes a 258-acre industrial complex constructed by the International Business Machines Corporation (IBM) in 1955 and operated by IBM for over 30 years. The Site was purchased from IBM by two related entities, AG Properties of Kingston, LLC (AG Properties) and Ulster Business Complex, LLC in February 1998. The Site is operated and managed by a third related entity, TechCity Properties, Inc. (TechCity). Various parcels of the facility have been transferred to related limited liability corporations and leased to various tenants since that time. Several Buildings were demolished by TechCity from 2015 through 2016.

When EPA first became involved in the Site in May 2017, EPA identified the following areas of concern: 1) the interior of Building 1, which is 270,000 square feet in size where an improper asbestos abatement had occurred; and 2) Building 2, the interior and exterior of which contained friable asbestos and had been partially demolished in 2016. In April 2018, the EPA was informed of a third area of concern; three large debris piles containing regulated asbestos containing material (RACM) which were generated during the demolition of Building 25. The entire Site, including the three areas of concern, is not fenced and is accessible to the tenants, visitors, and other persons entering the facility including visitors to adjacent soccer fields.

The Superfund and Emergency Management System identification number for the Site is NYD001359694. The removal action was considered an emergency.

A. Site Description

1. Removal Site Evaluation (RSE)

In May 2017, EPA was contacted by Ulster County officials requesting assistance in addressing potential public health and environmental threats associated with friable asbestos from Buildings 1, 2, and 34 at the Site. EPA's Removal Action Branch (RAB) and Ulster County officials inspected the Site on May 4, 2017 and observed a 40-foot-long trailer containing hundreds of bags of friable asbestos left behind by TechCity's asbestos abatement contractor, A2 Environmental Solutions, LLC (A2ES); Building 1, left with open and unsecured windows/doors and asbestos containment curtains in disrepair; and Building 2 left partially demolished with openings in the roof where friable asbestos pipe covering was visible from the outside. Also observed during the inspection were three large debris piles, between ten feet and 20 feet high, which had been generated from the demolition of Building 25.

Building 1 is an expansive one-story structure which had undergone an asbestos abatement by A2ES. On August 1, 2016, New York State Department of Labor (NYSDOL) inspected the asbestos abatement activities at Building 1 and observed several individuals conducting dry removal of ACM, which was causing visible asbestos emissions throughout the Building. Inspectors noted several violations and issued a stop work order to A2ES for violations of

New York State Industrial Code Rule 56 (12 NYCRR Part 56). NYSDOL determined that the entire interior of the structure was contaminated with asbestos due to the improper asbestos abatement activities.

Building 2 was a 1,000 square foot structure attached to Building 1. The Building was partially demolished by another contractor hired by TechCity in 2016. In November 2017, EPA collected ten samples of suspected ACM from the exposed walls and the partially demolished roof of Building 2. Of the ten samples collected from the Building, five samples were found to contain friable asbestos. Amosite asbestos was positively identified in four bulk samples at concentrations ranging from 3.06% to 57.10%, and chrysotile asbestos was positively identified in five bulk samples at concentrations up to 50% (see Attachment 1).

In December 2017, at the request of EPA and with the agency's oversight, a contractor for TechCity sprayed areas of concern on Building 2 with a temporary encapsulant to prevent the release of asbestos fibers. TechCity also removed non-friable asbestos vinyl flooring adjacent to former Building 34. EPA advised TechCity that the encapsulant actions were interim measures designed to protect public health and the environment until the asbestos concerns were permanently addressed.

In April 2018, NYSDOL notified EPA that it considered the three Building 25 debris piles to be friable RACM. These piles are situated approximately 200 feet south of Building 1 and are located on the slab of the former Building 25. Thereafter, under EPA oversight, TechCity covered the piles with tarps, installed hay bale barriers, and posted warning signs. The tarps lasted less than two months and had to be replaced by TechCity again in June 2018. Since that time, the tarps have had to be replaced or the piles recovered multiple times. The RACM piles are immediately adjacent to athletic fields that are used by, among others, a local children's soccer league.

Based on the presence of friable asbestos in Buildings 1 and 2, the Site was determined to pose an immediate public health threat to individuals frequenting the Site. These individuals include tenants, visitors, and persons who can frequent the Site which is unsecured and readily accessible to both pedestrians and vehicles.

2. Physical location

The Site is located at 300 Enterprise Drive in the Town of Ulster in Ulster County, New York, 12401 (41.9685955°N, -74.0082493°W). The Site includes a 258-acre industrial complex bordered by residential properties to the north and south, an active railway and commercial district to the east, and the Esopus Creek and adjoining woodlands to the west (see Figure 1). Youth soccer fields are located within the boundaries of the Site, less than 850 feet from the areas of concern described herein. The areas of concern include Building 1, Building 2 (now removed), and the three large RACM piles generated from the demolition of Building 25.

3. Site characteristics

The industrial complex at the Site was constructed by IBM in 1955 and was operated by IBM for over 30 years. The Site contains several Buildings and support structures. The Site was purchased from IBM by two related entities, AG Properties and Ulster Business Complex, LLC in February 1998. The Site is operated and managed by a third related entity, TechCity. Various parcels of the facility have been transferred to related limited liability corporations and leased to various tenants since that time. Although several of the Buildings had been tenant-occupied since 1998, many of the Buildings are currently vacant but a few are occupied by commercial tenants. When EPA first became involved in the Site in 2017, EPA identified the following areas of concern: 1) The interior of Building 1, which is 270,000 square feet in size where an improper asbestos abatement occurred; 2) Building 2, the interior and exterior of which contained friable asbestos and had been partially demolished in 2016. EPA was notified of a third area of concern in April 2018; three large debris piles containing RACM, which were generated during the demolition of Building 25. The entire Site, including the three areas of concern, is not fenced and is accessible to the tenants, visitors, and other persons entering the facility including the adjacent soccer fields.

This is the first Action Memorandum for removal activities (RV1) at the Site.

4. Release or threatened release into the environment of a hazardous substance, or pollutant, or contaminant

As indicated in Section II., A.1., sampling and analysis identified asbestos, a CERCLA hazardous substance, as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) and listed in 40 CFR Table 302.4, as being present at the Site. The Site is a facility within the meaning of Section 101(9) of CERCLA, 42 U.S.C. § 9601(9), and the presence of asbestos as observed and documented at the Site constitutes a "release" or threat of release within the meaning of Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

Hazardous Substance	Statutory Source for Designation under CERCLA
Asbestos	Clean Water Act Section 307(a) Clean Air Act Section 112

The mechanism for the release or threat of release of friable asbestos into the environment includes dispersion or emission from the partially demolished Building 2. There is a risk of continued release of asbestos contamination from Building 1 and the RACM piles, which contain friable asbestos in an unsecured and/or deteriorated condition that was open to the environment and has not been permanently abated.

Conditions at the Site, including those related to Buildings 1 and 2, meet the requirements of Section 300.415(b) of the National Contingency Plan (NCP) for the undertaking of a CERCLA removal action.

5. NPL status

The Site is not listed on the NPL, nor is it proposed to be listed.

6. Maps, pictures, and other graphic representations

See Site Map, Figure 1, attached hereto.

B. Other Actions, to Date

1. Previous actions

Following EPA's initial inspection with Ulster County officials on May 4, 2017, EPA contacted the NYSDOL for guidance on interim actions that TechCity could undertake to ensure compliance with the applicable regulations for completion of the asbestos abatement activities at the Site. The resulting NYSDOL guidance and variances governed performance of the following asbestos abatement activities voluntarily performed by TechCity with EPA oversight:

- Removal and decontamination of storage trailers abandoned by A2ES outside of Building 1 and the disposal of the asbestos contained therein;
- Installation of critical barriers on Buildings 1 and 2;
- Application of an asbestos encapsulant spray on the demolished portion of Building 2; and
- The removal and off-Site disposal of asbestos containing tiles and mastic from the slab of Building 34.

These removal activities, which were designated by EPA as PJ1, were performed by TechCity pursuant to NYSDOL approved variances utilizing NYSDOL certified asbestos abatement contractors between June 16, 2017 and February 16, 2018.

In April 2018, NYSDOL notified EPA that it considered the (three) Building 25 debris piles to be friable RACM. Thereafter, under EPA oversight, TechCity covered the piles with tarps, installed hay bale barriers, and posted warning signs. Due to the inadequate size and composition of the tarps, the tarps soon failed. The damaged tarps were replaced on June 22, 2018 and again on September 24, 2018 prior to the completion of the response action on September 27, 2018. These removal activities were designated by EPA as PJ2.

2. Current actions

Between May 2017 and November 2019, EPA attempted to have TechCity voluntarily address the asbestos conditions concerning Buildings 1, 2, and 25 through permanent measures given that the temporary measures noted above were no longer effective. On December 11, 2019, EPA sent a letter to five parties, including TechCity, notifying them of their potential liability under CERCLA and requesting that they cooperate by consensually performing a CERCLA removal

action. EPA's letter asked that the PRPs notify EPA if they were willing to voluntarily finance and/or perform a CERCLA removal action to permanently address the release or threat of release of friable asbestos at Building 1, Building 2, and the three RACM piles from former Building 25 at the Site.

As none of the notified PRPs indicated a willingness to undertake all the work called for by EPA to permanently address the asbestos in the areas discussed above, EPA obtained the former Acting Division Director's verbal authorization for funding to commence a CERCLA emergency removal action on February 12, 2020. Removal activities authorized under the verbal authorization included:

- Replacing and/or repairing critical barriers on Building 1, as needed;
- Demolish Building 2 while segregating demolition debris to minimize the amount of asbestos and maximize the amount of recyclable materials to the extent practicable, and transporting the materials for off-Site disposal and recycling; and
- Installing weather resistant tarps on the RACM piles, as deemed necessary by EPA.

Acting upon the verbal authorization of funding, EPA initiated removal activities at the Site (RV1) on March 13, 2020. As of March 16, 2020, EPA was fully mobilized on-Site and initiated the demolition of Building 2 utilizing EPA's Emergency Response and Remediation Services (ERRS) contractor which performed all NYSDOL asbestos regulated activities under the oversight of a NYSDOL licensed 3rd Party Asbestos Consultant/Air Monitoring contractor. As of March 26, 2020, all activities relating to the demolition and off-Site disposal of Building 2 were completed, resulting in the off-Site disposal of 225 tons of RACM and the off-Site recycling of 150 tons of decontaminated steel.

Prior to demobilizing on March 26, 2020, ERRS also repaired critical barriers on Building 1, posted asbestos warning signs at all entry ways, and installed fencing along the eastern side of the Building to limit access to portions of the Building's exterior where physical hazards from loose masonry material was present.

The three large RACM piles are currently covered with tarps installed by TechCity's contractor, which is inspecting and maintaining them. On September 16, 2020, Region 2 issued Administrative Order for a Removal Action, Index No. CERCLA-02-2020-2038 (Order), which directs TechCity, AG Properties, Alan L. Ginsberg, A2ES, Stephanie Laskin, and Jeffrey B. Laskin to, among other things, remove the three large RACM piles as well as secure and/or permanently abate friable asbestos in Building 1 at the Site. The Order became effective on October 14, 2020. TechCity, AG Properties, and Mr. Ginsberg, President and CEO of TechCity, are complying with the Order and have been moving forward with the required work. EPA has been receiving weekly updates and pictures of the condition of the piles.

C. State and Local Authorities' Role

1. State and local actions, to date

NYSDOL continues to work in close coordination with EPA on all asbestos related issues at the Site.

Since requesting EPA's assistance in May 2017, Ulster County has worked in coordination with EPA and NYSDOL regarding TechCity's efforts to maintain the critical barriers on Building 1, which along with Building 2, Ulster County took title to in a tax foreclosure proceeding in March 2017. Ulster County's actions have included the replacement and upgrade of failed critical barriers installed on the loading dock bay doors on Building 1.

Ulster County and the Town of Ulster continue to work in close coordination with EPA on all asbestos-related removal activities at the Site.

2. Potential for continued State/local response

Other than NYSDOL's ongoing coordination with EPA on matters pertaining to asbestos present at the Site, there are no actions planned or being taken by the State or local government agencies to address the RACM piles or asbestos in Building 1.

III. THREAT TO PUBLIC HEALTH, OR WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The threat to public health or welfare posed by the asbestos conditions of Buildings 1, 2, and the three RACM piles at former Building 25, as well as the threat of future releases of asbestos, a CERCLA hazardous substance, to the environment, has been well documented at the Site.

Asbestos is a hazardous substance as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and is listed in Table 302.4 of the NCP, 40 CFR § 302.4. Analytical data from samples collected by EPA from Building 2 in November 2017 identified Amosite asbestos at concentrations ranging from 3.06% to 57.10%, and Chrysotile asbestos at concentrations ranging up to 50%. Asbestos in these concentrations is considered a public health threat.

Asbestos mainly affects the lungs and the membrane that surrounds the lungs. Breathing high levels of asbestos fibers for a long time may result in scar-like tissue in the lungs and in the pleural membrane (lining) that surrounds the lung. This disease is called asbestosis and is usually found in workers exposed to asbestos. People with asbestosis have difficulty breathing, often a cough, and in severe cases heart enlargement. Asbestosis is a serious disease and can eventually lead to disability and death.

Breathing lower levels of asbestos may result in changes called plaques in the pleural membrane which is the thin layer of tissue that lines the pleural cavity, the space that surrounds the lungs and lies underneath the chest wall. Pleural plaques can occur in workers and sometimes in people living in areas with high environmental levels of asbestos. Effects on breathing from pleural plaques alone are not

usually serious, but higher exposure can lead to a thickening of the pleural membrane that may restrict breathing.

The conditions at the Site met the criteria for a CERCLA removal action as described in the NCP, 40 CFR 300.415(b)(2). The following criteria are directly applicable to the threats that existed and continue to exist at the Site:

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, or pollutants, or contaminants.

There was a threat to human health posed by the asbestos in Building 2 at the Site prior to its demolition. Building 1 and the three RACM piles continue to pose a threat. Since the Site is not secured, tenants, trespassers, visitors, soccer players, etc. were at risk. Any entry into Buildings 1 and 2 could disturb asbestos on the floor of those structure which could cause tracking of asbestos out of the Buildings and into public areas and/or released into the air.

Weather conditions that may cause hazardous substances, or pollutants, or contaminants to migrate or be released.

Friable asbestos was present in/on Building 2, which was partially demolished and open to the environment for over a year before EPA removed it. At Building 1 and in the RACM piles, the friable asbestos therein is subject to weathering, potentially releasing asbestos fibers into the environment. Once in the environment, the stable mineral fibers persist and do not break down further. Steady wind traveling across the Site will result in asbestos fibers to be entrained in the air resulting in the spread of asbestos fibers to the environment impacting areas frequented by the public.

The availability of other appropriate federal or State response mechanisms to respond to the release.

EPA was the only government agency capable of taking timely and appropriate action to respond to the threat posed by the presence of hazardous substances at the Site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from the Site presented an imminent and substantial endangerment to public health, or welfare, or the environment.

V. ACTIONS PROPOSED OR TAKEN AND ESTIMATED COSTS

A. Actions Proposed or Taken

1. Action description

The funding request documented in this Action Memorandum was necessary to mitigate the threats posed by the asbestos contaminated materials identified herein. The activities approved and/or taken to address the public health threats were as follows:

- Replacing and/or repairing critical barriers on Building 1. Such activities were completed on March 26, 2020;

- Demolishing Building 2 and segregating the debris to minimize the amount of RACM and maximize the amount of recyclable materials, and off-Site disposal and recycling of those materials. Such activities were completed on March 26, 2020; and
- Installing new tarps on three RACM piles. Such actions have not been necessary due to TechCity's ongoing monitoring and maintenance of the tarps. EPA will conduct this work if TechCity fails to do so.

All off-Site disposal of hazardous waste and/or substances complied with the CERCLA Off-Site Rule, 40 CFR Section 300.440.

2. Contribution to remedial performance

The response actions documented in this Action Memorandum addressed the direct contact threat to the public from friable asbestos. The activities contributed effectively to any long-term response action with respect to the release or threat of release of hazardous substances at the Site.

3. Engineering Evaluation/Cost Analysis (EE/CA) (for non-time critical actions only)

Because of the time critical nature of this removal action, an EE/CA was not prepared.

4. Applicable or Relevant and Appropriate Requirements (ARARs)

ARARs within the scope of this project were or will be met to the extent practicable given the exigencies of the situation. ARARs for the removal activities at Buildings 1, 2, and the Building 25 debris piles include the Clean Air Act (CAA), the National Emissions Standards for Hazardous Air Pollutants (NESHAP), and the New York State Industrial Code Rule 56 (12 NYCRR Part 56).

5. Project schedule

On-Site mitigation activities including the securing of Building 1 and the demolition and off-Site disposal of Building 2 were initiated on March 13, 2020 and completed on March 26, 2020. EPA will monitor TechCity's actions related to the maintenance of the three RACM piles and will continue to do so until TechCity completes the scope of work pursuant to the Order.

B. Estimated and Expended Costs

The estimated and expended costs for RV1 is summarized below.

Extramural Costs	**Total Funding Authorized**	**Cost to Date**	**Funding Remaining**
Regional Removal Allowance Costs (Total cleanup contractor including labor, equipment and materials)	$475,000	$130,000	$345,000
Other Extramural Costs Not Funded by the Regional Allowance			
Total Removal Support Team (RST) Costs	$25,000	0	$25,000
Subtotal, Extramural Costs	$500,000	0	$370,000
Extramural Cost Contingency 20%	$0	0	0
TOTAL REMOVAL ACTION PROJECT CEILING	$500,000	$130,000	$370,000

VI. EXPECTED CHANGE IN THE SITATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Had the removal activities relating to Buildings 1 and 2 been delayed or not taken, the ongoing release or threat of release of friable asbestos at these Buildings would have continued unabated, posing a threat to public health, or welfare, or the environment. The direct contact threat posed by asbestos, a hazardous substance, at the Site presented a significant threat to human health. If no actions were taken, tenants, visitors, and trespassers would continue to come into direct contact with asbestos.

VII. OUTSTANDING POLICY ISSUES

There are no known outstanding policy issues associated with the Site at the present time.

As per Delegation 14-2, a copy of this Action Memorandum will be provided to EPA's Office of Emergency Management (OEM), Office of Land and Emergency Management (OLEM) within two weeks of approval since this action was conducted as an emergency.

VIII. ENFORCEMENT

Between May 2017 and November of 2019, EPA attempted to have TechCity Properties voluntarily address the asbestos conditions concerning Buildings 1, 2, and former 25 through permanent measures given that the temporary measures noted above were no longer effective.

On December 11, 2019, EPA notified five parties of their potential liability under CERCLA and requested that they cooperate by consensually performing a CERCLA removal action to permanently address the release or threat or release of friable asbestos at Buildings 1, 2, and the three RACM piles

from former Building 25 at the Site. None of the notified Respondents indicated a willingness to undertake all the work called for by EPA.

As discussed above, on September 16, 2020, Region 2 issued a removal Order which directed the Respondents thereto to abate the significant remaining threats posed by friable asbestos at the Site, including removal of the three RACM piles as well as secure and/or permanently abate friable asbestos in Building 1 at the Site. The Order became effective on October 14, 2020. TechCity, AG Properties, and Mr. Ginsberg, are complying with the Order.

The total EPA cost for this removal action, based on full-cost accounting practices that will be eligible for cost recovery, is estimated to be $917,460, and was calculated as follows:

COST CATEGORY	**AMOUNT**
Direct Extramural cost	$500,000
Direct Intramural Cost	$100,000
Subtotal Direct Costs	$600,000
Indirect costs (Indirect Regional Cost Rate 52.91%)	$317,460
Estimated EPA Costs eligible for Cost Recovery	$917,460

This estimate includes direct costs, which include direct extramural costs and direct intramural costs. Indirect costs are calculated based on and estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with full cost accounting methodology which became effective on October 2, 2000. These estimates do not include prejudgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of the removal action. The estimates are for illustrative purposes only and their use in this Action Memorandum may not be relied upon by any third party as binding upon EPA. Neither the lack of a total cost estimate nor deviation of actual costs from this estimate will affect the United States' right to cost recovery.

IX. RECOMMENDATION

This decision document represents the selected removal activities for the TechCity Site located in the Town of Ulster, Ulster County, New York. This document was developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record.

Conditions at the Site met, and continue to meet, the NCP Section 300.415(b) criteria for a removal action, and I recommend your approval of the removal activities. The total funding requested was $500,000, of which $475,000 was from the regional removal advice of allowance for mitigation contracting. There were sufficient funds in the Advice of Allowance to fund this action.

Please indicate your formal authorization of the RV1 removal activities at the TechCity Site, as per current Delegation of Authority, by signing below.

APPROVAL: Evangelista, Pat Digitally signed by Evangelista, Pat Date: 2021.05.03 12:43:56 -04'00' **DATE:** _____

Pat Evangelista, Director
Superfund and Emergency Management Division

DISAPPROVAL: _____ **DATE:** _____

Pat Evangelista, Director
Emergency and Emergency Management Division

cc: (after approval is obtained)
J. Prince, SEMD-DD
E. Wilson, SEMD-DD
J. Rotola, SEMD-RAB
D. Harkay, SEMD-RAB
B. Grealish, SEMD-RAB
V. Capon, ORC-NYCSB
M. Wieder, ORC-NYCSB
M. Mears, PAD
A. Rajkowski-Reyes, OPM-GCMB
M. Fiore, OIG
B. Schlieger 5104A
J. Meachem, NYSDOL
J. Pensabene, NYSDOL
D. Lanners, NYSDEC
A. Raddant, USDOI
F. Csulak, NOAA
L. Battes, NYSEMO
S. Bates, NYSDOH
T. Benton, START

ATTACHMENT 1

Analytical Results Summary Table
Building 2 Asbestos Sampling
TechCity Site, Town of Ulster, Ulster County, NY

November 9, 2017

Weston Solutions, Inc.
Suite 201
1090 King Georges Post Road
Edison, New Jersey 08837-3703
732-585-4400 • Fax: 732-225-7037
www.westonsolutions.com

The Trusted Integrator for Sustainable Solutions

REMOVAL SUPPORT TEAM 3
EPA CONTRACT EP-S2-14-01

January 8, 2018

Mr. Don Graham, On-Scene Coordinator
U.S. Environmental Protection Agency, Region II
Removal Action Branch
2890 Woodbridge Avenue
Edison, New Jersey 08837

EPA CONTRACT No: EP-S2-14-01
TDD No: TO-0010-0042
DC No: RST3-04-D-0106
SUBJECT: REMOVAL ASSESSMENT SAMPLING REPORT, PHASE II
TECHCITY SITE,
TOWN OF ULSTER, ULSTER COUNTY, NEW YORK

Dear Mr. Graham,

Enclosed please find the Removal Assessment Sampling Report, Phase II for the bulk suspected asbestos-containing material (SACM) sampling event conducted by the U.S. Environmental Protection Agency (EPA) with the support of Weston Solutions, Inc., (RST 3) at the TechCity Site located in the Town of Ulster, Ulster County, New York on November 9, 2017.

If you have any questions or comments, please do not hesitate to contact me at (732) 570-4997.

Sincerely,

Weston Solutions, Inc.

Michael Mannino
RST 3 Site Project Manager

Enclosure
cc: TDD File: TO-0010-0042

REMOVAL ASSESSMENT SAMPLING REPORT

TECHCITY SITE

Town of Ulster, Ulster County, New York
SSID No: A27N

DC No: RST3-04-D-0106
TDD No: TO-0010-0042
EPA Contract No: EP-S2-14-01

Prepared for:

U.S. Environmental Protection Agency, Region II
2890 Woodbridge Avenue
Edison, New Jersey 08837

Prepared by:

Removal Support Team 3
Weston Solutions, Inc.
Federal East Division
Edison, New Jersey 08837

January 2018

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1.0 Introduction

On November 9, 2017, the U.S. Environmental Protection Agency (EPA), Region II Removal Action Branch (RAB), with the support of Weston Solutions, Inc., Removal Support Team 3 (RST 3) conducted a Removal Assessment at the TechCity Site (the Site). Bulk samples of suspected asbestos-containing materials (SACM) were collected from a demolished on-site facility building. The bulk SACM samples were submitted for laboratory analysis in order to determine if any building materials contained asbestos.

1.1 Site Location and Description

The Site is located at 300 Enterprise Drive in the Town of Ulster, Ulster County, New York. It is comprised of a business park, and is situated in a mixed residential and commercial area. The Site is bordered by U.S. Highway 209 and residential and commercial properties to the north, residential properties to the south, commercial properties to the east, and a wooded area and Esopus Creek to the west.

Refer to Attachment A, Figure 1: Site Location Map.

1.2 Site History and Background

The business park was built in the 1950s by International Business Machines (IBM) and they operated it for more than 30 years until the property came under new ownership in 1998, and has remained under the same ownership since. The current property owner began building demolition, which included asbestos abatement activities. Mid-abatement, work was terminated due to unsafe work practices. The County of Ulster contacted EPA and requested that an investigation be conducted to determine if conditions at the Site posed a health risk to adjacent residences. On May 4, 2017, EPA and County health officials visited the Site to conduct visual inspections and document the conditions of the Site.

On May 23, 2017, EPA and RST 3 conducted a Removal Assessment at the Site. During the inspection of the on-site facility buildings, SACM was identified in various tiles, fibrous material, foam-like material, and mats within the demolished facility buildings. For ease of reference, the facility buildings were identified as Building 1, Former Building 2, Former Building 34, and Former Building 35. A total of eight bulk SACM samples were collected from the Site and analyzed by RST 3-procurred laboratory for asbestos via New York State (NYS) Environmental Laboratory Accreditation Program (ELAP) Polarized Light Microscopy (PLM) Methods 198.1 (if friable) and 198.6 (if non-friable); and via NYS Transmission Electron Microscopy (TEM) Method 198.4, if PLM result was less than (<) 0.1 percent (%). Analytical results positively identified asbestos in one SACM sample (a blue tile) collected from the location of Former Building 34. Analytical results indicated that the one SACM sample contained chrysotile asbestos at a concentration ranging from 5.0% to 5.6%.

2.0 Scope of Work

RST 3 was tasked by EPA with collecting bulk SACM samples from locations on-site within the partially demolished Former Building 2 for asbestos analysis via NYS ELAP PLM Methods 198.1

(if friable) and 198.6 (if non-friable); and via NYS TEM Method 198.4, if PLM result was < 0.1 %. In addition, RST 3 was tasked with providing support for photographic documentation and notation in the Site logbook of all site activities and entering sample information into the EPA Scribe database, an environmental data management system.

3.0 On-Site Personnel

Name	Affiliation	Duties On-site
Don Graham	EPA, Region II	On-Scene Coordinator
Bernard Nwosu	Weston Solutions, Inc., RST 3	Site Project Manager, Site H&S, Site QA/QC, Sample Collection and Sample Management

EPA: U.S. Environmental Protection Agency
QA/QC: Quality Assurance/Quality Control
RST 3: Removal Support Team 3
H&S: Health and Safety

4.0 Summary of Site Activities

On November 9, 2017, EPA and RST 3 performed a Removal Assessment sampling event at the Site. During the sampling event, bulk SACM samples were collected from various locations throughout Former Building 2. Prior to sample collection, the EPA On-Scene Coordinator (OSC) and RST 3 personnel conducted an inspection of Former Building 2 in order to select sample locations and determine potential hazards associated with collecting the SACM samples from the proposed sample locations within the partially demolished building structures. A sturdy A-frame ladder was utilized to access and collect the SACM samples from the selected locations which were approximately 12 feet above the ground. Sample collection was performed in Level C personal protective equipment (PPE). A total of 10 bulk SACM samples (P001-BULK009-01 through P001-BULK018-01) were collected from various building materials, including materials suspected to be insulation pipe, deteriorated drywall, furnace wrap, pipe wrap, and floor insulation. All the bulk SACM samples and the sample locations were documented with digital photographs. On November 10, 2017, RST 3 submitted all the SACM samples to an RST 3-procurred laboratory for analysis.

Refer to Attachment A, Figure 2: Sample Location Map and Attachment C: Photographic Documentation Log

5.0 Sampling Methodology

All on-site field work and sampling activities were performed in accordance with the RST 3 site-specific Health and Safety Plan (HASP), site-specific Uniform Federal Policy (UFP) Quality Assurance Project Plan (QAPP), and EPA's Region II Emergency Response Team (ERT)/Scientific, Engineering, Response & Analytical Services (SERAS) contractor's Standard Operation Procedure (SOP) Number (No.) 2001: *General Field Sampling Guidelines* and EPA Region IV Science and Ecosystem Support Division (SESD) SOP No. SESDGUID-104-R1: *Bulk Sampling for Asbestos*.

Bulk samples were collected from SACM that was identified during the inspection of the Former Building 2. The SACM was wetted prior to extraction with a safety knife and/or an extendable

grabber tool. The extracted SACM was placed into a resealable polyethylene bag which was then placed into a second resealable polyethylene bag. New nitrile gloves were donned prior to collecting each bulk SACM sample. A total of 10 bulk SACM samples were collected. All sample information was transcribed into EPA's Scribe database from which sample labels and Chain of Custody (COC) record were generated. The sample labels were affixed to each sample bag and then stored in a transport cooler.

6.0 Laboratory Receiving Samples

Laboratory Name/Location	Sample Matrix	Analyses
EMSL Analytical, Inc. 200 Route 130 North Cinnaminson, New Jersey 08077 (RST 3-procured Laboratory)	Bulk SACM	NYS ELAP PLM Methods 198.1 and 198.6; and NYS ELAP Method 198.4 via TEM, if PLM result is <0.1%.

NYS: New York State
PLM: Polarized Light Microscopy
< : Less than
ELAP: Environmental Laboratory Accreditation Program
TEM: Transmission Electron Microscopy
% : Percent

7.0 Sample Collection and Dispatch

On November 9, 2017, RST 3 collected a total of 10 bulk SACM samples from the Site. On November 10, 2017, RST 3 hand-delivered all 10 bulk SACM samples under COC record No. 2-110917-0010-0042-0002 to a courier from EMSL Analytical, Inc. Laboratory (EMSL) located in Cinnaminson, New Jersey for asbestos analysis via NYS ELAP PLM Methods 198.1 (if friable) and 198.6 (if non-friable); and via NYS TEM Method 198.4, if PLM result was < 0.1 %.

Refer to Attachment B, Table 1: Sample Collection and Validated Analytical Results Summary Table - Asbestos and Attachment D: Chain of Custody Record.

8.0 Analytical Results Summary

Based on the validated analytical results, asbestos was detected in five of the 10 bulk SACM samples collected during the Removal Assessment sampling event. Amosite asbestos was positively identified in four bulk SACM samples at concentrations ranging from 3.06% to 57.10%. Chrysotile asbestos was positively identified in five bulk SACM samples at concentrations ranging from <1% to 50%. Two of the bulk SACM samples (P001-BULK013-01 and P001-BULK014-01) each contained two layers of different compositions. The two different layers of each of these bulk SACM samples were separately analyzed by the laboratory. Both layers of P001-BULK013-01 contained asbestos. One layer of P001-BULK014-01 contained asbestos.

Refer to Attachment A, Figure 2: Sample Location Map and Attachment B, Table 1: Sample Collection and Validated Analytical Results Summary Table – Asbestos, and Attachment E: Validated Data Package.

9.0 Conclusion

Analytical results indicated that asbestos was positively identified in 50% of the samples collected from Former Building 2. Since asbestos is a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substance, EPA may consider immediate

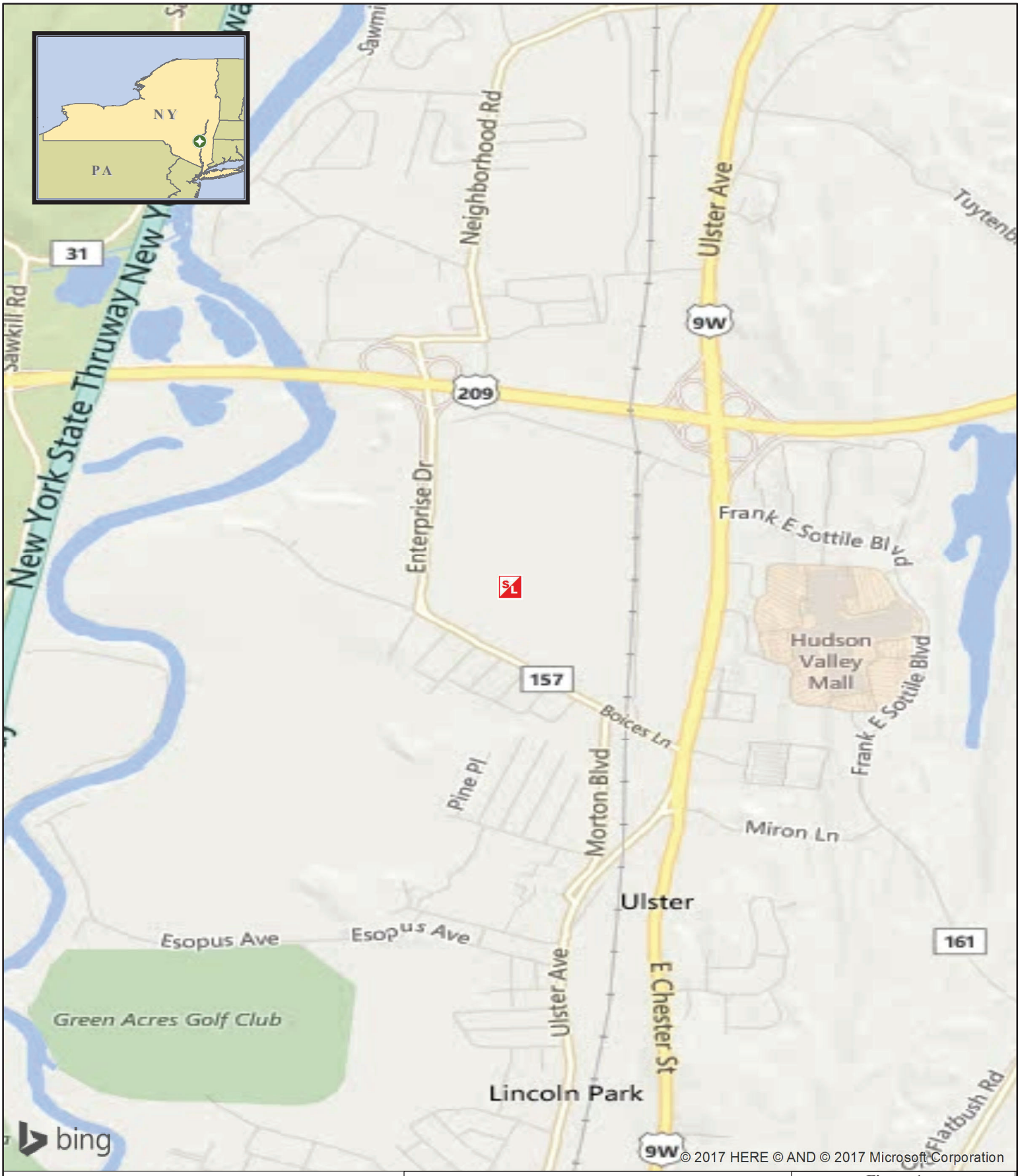
remedial options that would temporarily prevent the asbestos-containing materials (ACM) on-site from becoming airborne in order to prevent potential impact to human health, the immediate environment, and the surrounding community. In addition, EPA may consider a Removal Action in the future to completely eliminate the hazard posed to human health and the potential impact on the environment due to the presence of ACM at the Site.

Report prepared by: Michael Mannino — 1/8/2018
Michael Mannino — Date
RST 3 Site Project Manager

Report reviewed by: Bernard Nwosu — 1/8/2018
Bernard Nwosu — Date
RST 3 Group Leader

ATTACHMENT A

Figure 1: Site Location Map
Figure 2: Sample Location Map



Legend

Site Location

N

0 0.1 0.2 0.4 0.6 0.8 Miles

Weston Solutions, Inc.
East Division

In Association With
Scientific and Environmental Associates, Inc.,
Environmental Compliance Consultants, Inc.,
Avatar Environmental, LLC, On-Site Environmental,
Inc.and Sovereign Consulting, Inc

Figure 1:
Site Location Map

Tech City Site
Town of Ulster, New York

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

DATE MODIFIED: 5/19/2017

GIS ANALYST:	M. MANNINO
EPA OSC:	D. GRAHAM
RST SPM:	M. MANNINO
FILENAME:	170519_SITELOCATIONMAP.MXD

\\FSED2DATA1\GISDATA\RST_3\00070194\MXD\170519_SITELOCATIONMAP.MXD

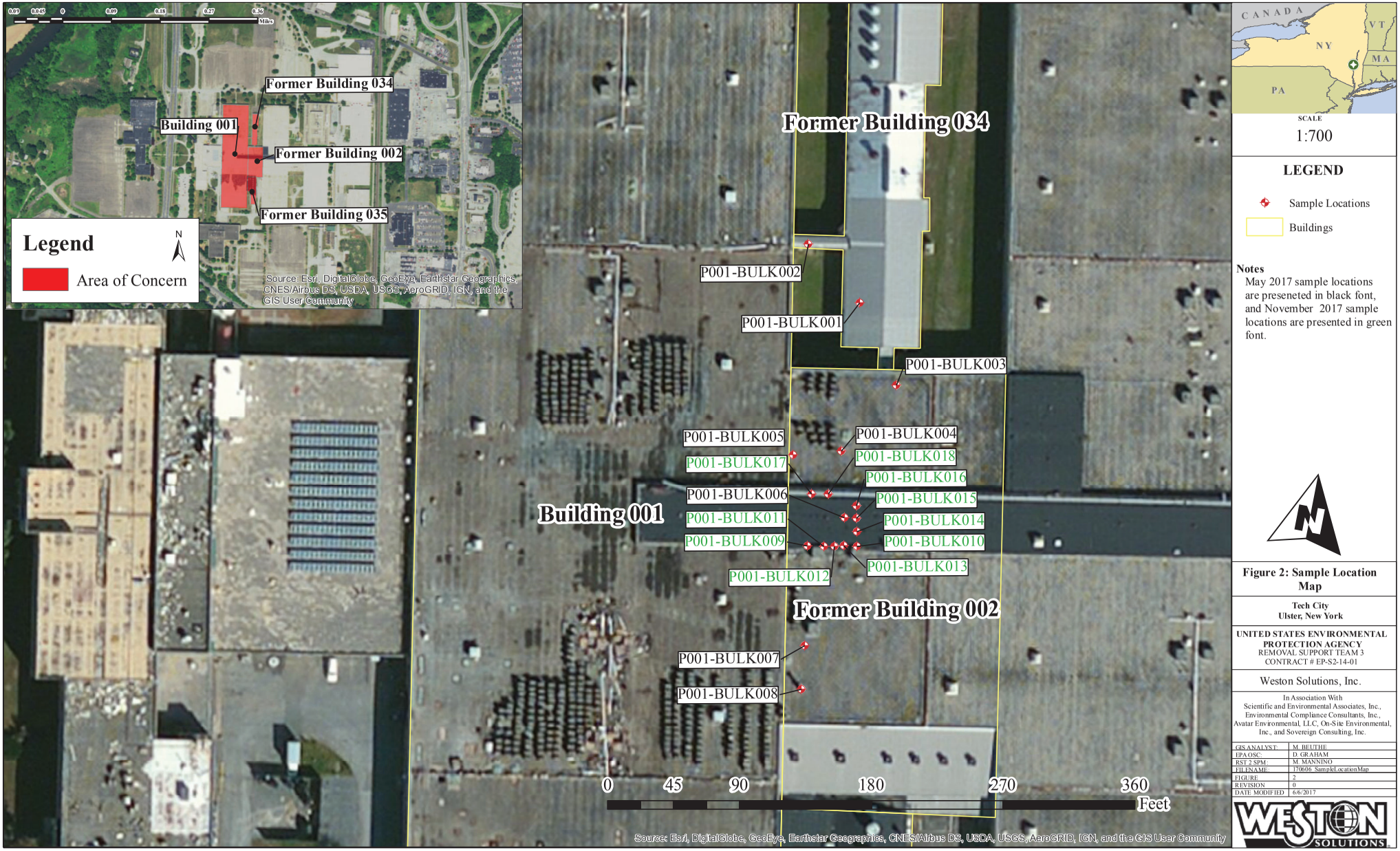


Figure 2: Sample Location Map

Tech City
Ulster, New York

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM 3
CONTRACT # EP-S2-14-01

Weston Solutions, Inc.

In Association With
Scientific and Environmental Associates, Inc., Environmental Compliance Consultants, Inc., Avatar Environmental, LLC, On-Site Environmental, Inc., and Sovereign Consulting, Inc.

GIS ANALYST:	M. BEUTHE
EPA OSC:	D. GRAHAM
RST 2 SPM:	M. MANNINO
FILENAME:	170606_SampleLocationMap
FIGURE	2
REVISION	0
DATE MODIFIED	6/6/2017

WESTON SOLUTIONS

ATTACHMENT B

Table 1: Sample Collection and Validated Analytical Results Summary Table - Asbestos

Table 1: Sample Collection and Validated Analytical Results Summary Table - Asbestos
TechCity Site
Town of Ulster, Ulster County, New York
November 9, 2017

Sample Location No.	Location Description	RST 3 Sample No.	Color	Non-Asbestos		Asbestos		
				Fibrous	Non-Fibrous	PLM NYS 198.1 (Friable)	PLM NYS 198.6 (NOB)	TEM NYS 198.4 (NOB)
P001-BULK009	Second floor, suspected to be pipe insulation	**P001-BULK009-01**	Gray/White	**98% Glass**	**2% other**	**ND**	Not Analyzed	Not Analyzed
P001-BULK010	First floor, base of wall, suspected to be detoriorated drywall	**P001-BULK010-01**	Brown/White	**8.00% Cellulose 20.00% Glass**	**72.00% other**	**ND**	Not Analyzed	Not Analyzed
P001-BULK011	Second floor, suspected to be pipe insulation	**P001-BULK011-01**	White	NS	**55.60% other**	**33.30% Amosite 11.10% Chrysotile 44.40% Total**	Not Analyzed	Not Analyzed
P001-BULK012	Second floor, suspected to be pipe insulation	**P001-BULK012-01**	Gray/White	**11.8% Min. Wool**	NS	Not Analyzed	Inconclusive: Non-detect	**ND**
P001-BULK013	Second floor, suspected to be insullation with tar	**P001-BULK013-01**	Brown	**70.00% Cellulose 15.00% Glass**	**10.92% other**	**3.06% Amosite 1.02% Chrysotile 4.08% Total**	Not Analyzed	Not Analyzed
			Black	NS	NS	Not Analyzed	**Inconclusive : <1%Amosite Inconclusive : <1%Chrysotile Inconclusive - <1% Total**	**<1%Amosite <1%Chrysotile <1% Total**
P001-BULK014	Second floor, suspected to be insulation and pipe wrap	**P001-BULK014-01**	Gray/White	NS	**50.00% other**	**50.00% Chrysotile**	Not Analyzed	Not Analyzed
			White	**98.00% Cellulose**	**2.00% other**	**ND**	Not Analyzed	Not Analyzed
P001-BULK015	Second floor, suspected to be degraded insulation	**P001-BULK015-01**	Brown/Gray	**80.00% Cellulose**	**14.44% other**	**4.17% Amosite 1.39% Chrysotile 5.56% Total**	Not Analyzed	Not Analyzed
P001-BULK016	Second floor, suspected to be furnace wrap	**P001-BULK016-01**	Gray/White	**90.00% Glass**	**10.00% other**	Non-detect	Not Analyzed	Not Analyzed
P001-BULK017	Second floor, near roof line, suspected to be pipe insulation	**P001-BULK017-01**	White	NS	**42.90% other**	**57.10% Amosite <1% Chrysotile 57.10% Total**	Not Analyzed	Not Analyzed
P001-BULK018	Second floor, suspected to be interior pipe wrap	**P001-BULK018-01**	White/Silver/ Yellow	**27.6% Min. Wool**	NS	Not Analyzed	Inconclusive: Non-detect	**ND**

Notes:
RST 3 - Removal Support Team 3
No. - Number
% - Percent
< - Less than
ND - Non-detect
NS - Not Specified
PLM - Polarized Light Microscopy
NYS - New York State
TEM - Transmission Electron Microscopy
NOB - Non Friable Organically Bound
VCM - Vermiculite Containing Material
Asbestos-Containing Material

ATTACHMENT C

Photographic Documentation Log

Photographic Documentation Log
TechCity Site
Town of Ulster, Ulster County, New York
November 9, 2017

Photograph 1: View of the partially demolished Building 2 at the TechCity Site (the Site). The U.S. Environmental Protection Agency (EPA) and Weston Solutions, Inc., Removal Support Team 3 (RST 3) performed Removal Assessment sampling of suspected asbestos-containing material (SACM) in Building 2.

Photograph 2: A total of 10 bulk SACM samples were collected for laboratory analysis from building materials located throughout the demolished structure of Building 2 in order to determine if the building materials contained asbestos.

Photograph 3: View of sample location P001-BULK009 from which sample P001-BULK009-01 was collected.

Photograph 4: Close up view of P001-BULK009-01. The bulk SACM sample is suspected to be pipe insulation.

Photograph 5: View of sample location P001-BULK010 from which P001-BULK010-01 was collected.

Photograph 6: Close up view of P001-BULK010-01. The bulk SACM sample is suspected to be deteriorated drywall.

Photograph 7: View of sample location P001-BULK011 from which P001-BULK011-01 was collected.

Photograph 8: Close up view of P001-BULK011-01. The bulk SACM sample is suspected to be pipe insulation.

Photograph 9: View of sample location P001-BULK012 from which P001-BULK012-01 was collected.

Photograph 10: Close up view of P001-BULK012-01. The bulk SACM sample is suspected to be pipe insulation.

Photograph 11: View of sample location P001-BULK013 from which P001-BULK013-01 was collected.

Photograph 12: Close up view of P001-BULK013-01. The bulk SACM sample is suspected to be a type of insulation coated with tar.

Photograph 13: View of sample location P001-BULK014 from which P001-BULK014-01 was collected. The bulk SACM sample is suspected to be insulation and pipe wrap.

Photograph 14: View of sample location P001-BULK015 from which P001-BULK015-01 was collected.

Photograph 15: Close up view of P001-BULK015-01. The bulk SACM sample is suspected to be degraded insulation.

Photograph 16: View of sample location P001-BULK016 from which P001-BULK016-01 was collected. The bulk SACM sample is suspected to be furnace wrap.

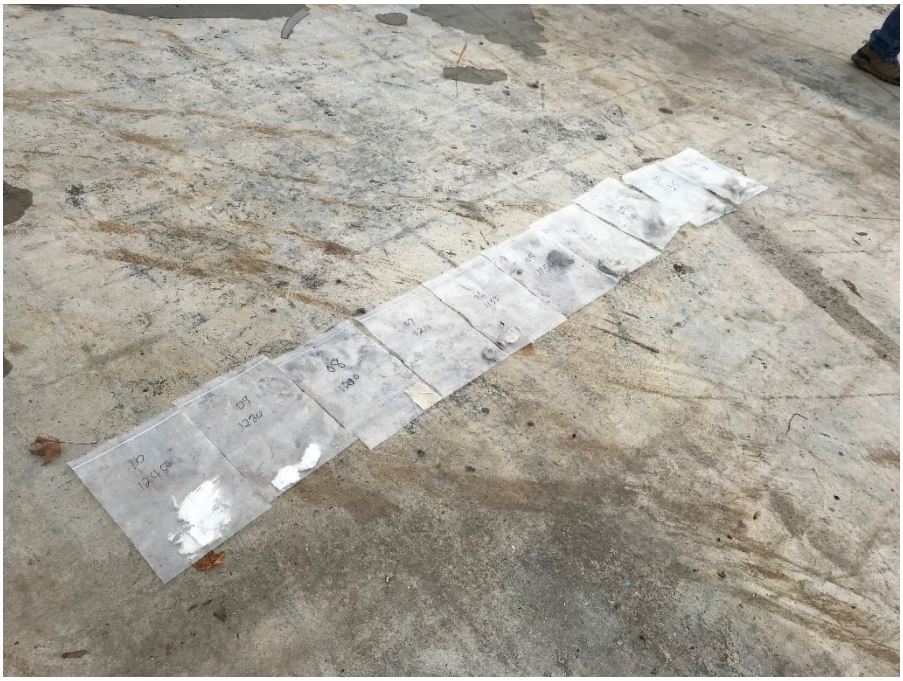
Photograph 17: View of sample location P001-BULK017 from which P001-BULK017-01 was collected. The bulk SACM sample is suspected to be pipe insulation.

Photograph 18: View of sample location P001-BULK018 from which P001-BULK018-01 was collected. The bulk SACM sample is suspected to be interior pipe wrap.

Photograph 19: View of some bulk SACM samples which were collected during the Removal Assessment sampling event and identified in the field as samples 01 through 05, but later renamed to correspond with P001-BULK009-01 through P001-BULK013-01, respectively.

Photograph 20: View of some bulk SACM samples which were collected during the Removal Assessment sampling event and identified in the field as samples 04 through 08, but later renamed to correspond with P001-BULK012-01 through P001-BULK016-01, respectively.

Photograph 21: View of some bulk SACM samples which were collected during the Removal Assessment sampling event and identified in the field as samples 07 through 10, but later renamed to correspond with P001-BULK015-01 through P001-BULK018-01, respectively.



Photograph 22: View of all 10 bulk SACM samples collected during the Removal Assessment sampling event and identified in the field as samples 01 through 10, but later renamed to correspond with P001-BULK009-01 through P001-BULK018-01, respectively.

ATTACHMENT D

Chain of Custody Record

USEPA
DateShipped: 11/10/2017
CarrierName: Hand Delivered
AirbillNo: NA

CHAIN OF CUSTODY RECORD
RFP Site #: 472
Contact Name: Michael Mannino
Contact Phone: 732-570-4997

No: 2-110917-0010-0042-0002
Lab: EMSL Analytical, Inc.
Lab Address: 200 Route 130 North
Lab Phone: 856-858-4800 x2304

Lab #	Sample #	Location	Matrix	Sample Date	Sample Time	Numb Cont	Container	Analyses	Preservative	Lab QC
	P001-BULK009-01	BULK009	Asbestos	11/9/2017	11:30	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK010-01	BULK010	Asbestos	11/9/2017	11:35	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK011-01	BULK011	Asbestos	11/9/2017	11:40	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK012-01	BULK012	Asbestos	11/9/2017	11:45	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK013-01	BULK013	Asbestos	11/9/2017	11:50	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK014-01	BULK014	Asbestos	11/9/2017	11:55	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK015-01	BULK015	Asbestos	11/9/2017	12:10	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK016-01	BULK016	Asbestos	11/9/2017	12:20	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK017-01	BULK017	Asbestos	11/9/2017	12:30	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK018-01	BULK018	Asbestos	11/9/2017	12:45	1	Poly Bag	Asbestos PLM/TEM	None	N

Special Instructions: Samples will be analyzed via NYS ELAP PLM Methods 198.1 (friable) and 198.6 (non-friable) and via NYS TEM Method 198.4, if PLM result is <0.1%. TAT: 1 week prelimiary/2 weeks validated. Please send analytical results to S.Sumbaly@WestonSolutions.com, Mike.Mannino@WestonSolutions.com, ben.nwosu@westonsolutions.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Bernard Chun (Weston)	11/10/17 1421		11-10-17, 14:21	

ATTACHMENT E

Validated Data Package

Weston Solutions, Inc.
Suite 201
1090 King Georges Post Road
Edison, New Jersey 08837-3703
732-585-4400 • Fax: 732-225-7037
www.westonsolutions.com

The Trusted Integrator for Sustainable Solutions

REMOVAL SUPPORT TEAM 3
EPA CONTRACT EP-S2-14-01

RST 3-04-F-0064

TRANSMITTAL MEMO

To:	Mr. Donald Graham, On-Scene Coordinator Removal Action Branch U.S. EPA, Region II
From:	Smita Sumbaly, Data Reviewer RST 3, Region II
Subject:	TechCity Site Data Validation Assessment
Date:	December 21, 2017

The purpose of this memo is to transmit the following information:

- Data validation results for the following parameters:

Asbestos PLM	7 Samples
Asbestos PLM/TEM	3 Samples

- Matrices and Number of Samples

Bulk	10 Samples

- Sampling Date: November 9, 2017

The final data assessment narrative and original analytical data package are attached.

cc:	RST 3 SPM:	Michael Mannino
	RST 3 SITE FILE TDD #:	TO-0010-0042
	RST 3 ANALYTICAL TDD #:	TO-0010-0120
	TASK#:	4120

U.S. ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

DATE: **December 21, 2017**

TO: **Donald Graham, On-Scene Coordinator**
U.S. EPA, Region II

FROM: **Smita Sumbaly**
RST 3 Data Review Team

SUBJECT: **QA/QC Compliance Review Summary**

As requested quality control and performance measures for the data packages noted have been examined and compared to EPA standards for compliance. Measures for the following general areas were evaluated as applicable:

Data Completeness
Sample Collection, Holding Times, and Preservation
Blank Analysis
Sample Sensitivity
Monthly Report PLM/TEM Calibrations

Any statistical measures used to support the following conclusions are attached so that the review may be reviewed by others.

Summary of Results

	Asbestos PLM	Asbestos TEM
Acceptable as Submitted	X	X
Acceptable with Comments		
Unacceptable, Action Pending		
Unacceptable		

Data Reviewed by: Smita Sumbaly Date: 12/21/2017

Approved By: Date: 12/21/17

Area Code/Phone No.: (732) 585-4410

NARRATIVE

Task No. 4120

SITE NAME: **TechCity Site**
300 Enterprise Drive,
Ulster, Ulster County, New York

Laboratory Name: EMSL Analytical, Inc., 200 Route 130 North, Cinnaminson, NJ 08077.

INTRODUCTION:

The laboratory's portion of this case consisted of 10 bulk presumed asbestos-containing material (PACM) samples. All samples were collected on November 9, 2017. The EMSL Order ID number is 041732699.

The laboratory reported No problem(s) with the receipt of these samples.

The laboratory reported No problems with the analyses of Asbestos PLM or TEM samples.

The evaluator has commented on the criteria specified under each fraction heading. All criteria have been assessed, but no discussion is given where the evaluator has determined that criteria were adequately performed or require no comment. Details relevant to these comments are given on the following forms.

Appropriate Form Is and Chain of Custody have been copied from the original data package and appended to the data assessment narrative for reference.

Title: Evaluation of Asbestos Data
Data Assessment Narrative

RFP #: 472/Task#: 4120 **Site: TechCity Site**

Contractor: WESTON-RST 3 **Reviewer: SMITA SUMBALY**

Matrix/No. of Samples: Bulk-10

A.2.1 Validation Flags- The following flags have been applied in red by the data validator and must be considered by the data user.

J- This flag indicates the result qualified as estimated.

Red- Line- A red-line drawn through a sample result indicates an unusable value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

Fully Usable Data- The results that do not carry "J" or "red-line" are fully usable.

A.2.2 The data assessment is given below and on the attached sheets.

On November 9, 2017, U.S. EPA Region II, RST 3 personnel collected 10 bulk PACM samples from the TechCity Site, located at 300 Enterprise Drive in the Town of Ulster, Ulster County, New York. On November 10, 2017, all the samples were picked by courier services from EMSL Analytical, Inc., 200 Route 130 North, Cinnaminson, New Jersey. The laboratory verified that the samples were received intact and properly custody sealed.

Out of the 10 bulk samples, two samples contained two layers, therefore a total of 12 samples were analyzed for asbestos.

Out of the 12 samples, nine friable bulk PACM samples were analyzed by Polarized Light Microscopy (PLM) using the procedures from the PLM NYS ELAP 198.1 Method. Suspected asbestos fibers were identified using the dispersion staining and the samples were quantified using visual estimation. Data was reported as percent asbestos. The quantification limit for the method is <1.0% (visual estimation/stratified count).

Out of the 12 samples, three non-friable bulk PACM samples were analyzed by PLM using gravimetric reduction procedures from the PLM NYS ELAP 198.6 Method. Data was reported as percent asbestos. The quantification limit for the method is <1.0% (visual estimation/stratified count).

As per NYS ELAP 198.6 Method, any sample found to be <1.0% or Inconclusive were then analyzed by Transmission Electron Microscopy (TEM) using the procedure from TEM NYS ELAP Method 198.4. The quantification limit for the method is <0.25% (visual estimation calculated with percent residue).

Client identification (ID) and laboratory ID numbers are as follows:

Client ID No.	Laboratory ID No.	Matrix	Sampling Date	Analysis
P001-BULK009-01	041732699-0001	Bulk	11/09/2017	Asbestos PLM
P001-BULK010-01	041732699-0002	Bulk	11/09/2017	Asbestos PLM
P001-BULK011-01	041732699-0003	Bulk	11/09/2017	Asbestos PLM
P001-BULK012-01	041732699-0004	Bulk	11/09/2017	Asbestos PLM & TEM
P001-BULK013-01-Insulation	041732699-0005	Bulk	11/09/2017	Asbestos PLM
P001-BULK013-01-Tar	041732699-0005A	Bulk	11/09/2017	Asbestos PLM & TEM
P001-BULK014-01-Insulation	041732699-0006	Bulk	11/09/2017	Asbestos PLM
P001-BULK014-01-Wrap	041732699-0006A	Bulk	11/09/2017	Asbestos PLM
P001-BULK015-01	041732699-0007	Bulk	11/09/2017	Asbestos PLM
P001-BULK016-01	041732699-0008	Bulk	11/09/2017	Asbestos PLM
P001-BULK017-01	041732699-0009	Bulk	11/09/2017	Asbestos PLM
P001-BULK018-01	041732699-0010	Bulk	11/09/2017	Asbestos PLM & TEM

Asbestos PLM analysis of Bulk by NY State ELAP 198.1:

Out of the 12 bulk samples, nine friable bulk samples were analyzed by PLM using the procedures from the PLM NYS ELAP 198.1 Method. All PLM data was reported on a percent asbestos basis. Out of nine sample, four samples were reported as none detected; four samples were reported between 3.06% to 57.10% Amosite asbestos and five samples were reported between <1.0% to 50.00% Chrysotile asbestos.

Asbestos PLM analysis of Bulk by NY State ELAP 198.6:

Out of the 12 bulk samples, three non-friable bulk samples were analyzed by PLM using the procedures from the PLM NYS ELAP 198.6 Method. All PLM data was reported on a percent asbestos basis. Out of the three samples, one sample was reported as Inconclusive: <1% Amosite asbestos and <1% Chrysotile asbestos; and two samples were reported as Inconclusive: none detected.

Method 198.6 PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing. **Samples with inconclusive results must not be interpreted as being non-ACM.**

Title: Evaluation of Asbestos Data
Data Assessment Narrative

Asbestos TEM analysis of Bulk by NY State ELAP 198.4:

Out of three samples, two non-friable bulk samples were reported as inconclusive: none detected and one sample was reported as <1% Amosite asbestos and <1% Chrysotile asbestos. Laboratory performed the confirmation analysis on all samples by TEM using the procedures from the TEM NYS ELAP 198.4 Method. All TEM data was reported on a percent asbestos basis.

QC Analysis

For QC purposes, the laboratory analyzed one inter-analyst QC via PLM NYS ELAP 198.6, one intra-analyst QC analysis via TEM NYS ELAP 198.4, and one lab blank via PLM NYS ELAP 198.6 and TEM NYS ELAP 198.4. All QC results are acceptable. The laboratory also submitted PLM calibration and contamination record, Monthly report for TEM calibrations, and Daily TEM calibration sheet.

A.2.3 Contract Problem/Non-Compliance:

None

Contractor Reviewer: _____ Signature: 12/21/2017 Date:

Verified by: _____ Signature: 12/21/2017 Date:

ASBESTOS DATA FOR BULK

Project: TechCity Site
Sampling Date: November 9, 2017

PLM NYS Method 198.1 - Friable, PLM NYS Method 198.6 NOB, and TEM NYS Method 198.4 NOB							
Client Sample ID Number	Laboratory Sample ID Number	Color	Non-Asbestos		Asbestos PLM NYS 198.1 Friable	Asbestos PLM NYS 198.6 NOB	Asbestos TEM NYS 198.4 NOB
			Fibrous	Non-Fibrous			
P001-BULK009-01	041732699-0001	Gray/White/ Yellow	98.00% Glass	2.00% Non-fibrous (other)	**None Detected**	Not Analyzed	Not Analyzed
P001-BULK010-01	041732699-0002	Brown/White	8.00% Cellulose 20.00% Glass	72.00% Non-fibrous (other)	**None Detected**	Not Analyzed	Not Analyzed
P001-BULK011-01	041732699-0003	White	-	55.60% Non-fibrous (other)	**33.30% Amosite 11.10% Chrysotile 44.40% Total**	Not Analyzed	Not Analyzed
P001-BULK012-01	041732699-0004	Gray/White	11.8% Min. Wool	10.92% Non-fibrous (other)	Not Analyzed	**Inconclusive: None Detected**	**None Detected**
P001-BULK013-01-Insulation	041732699-0005	Brown	70.00% Cellulose 15.00% Glass	-	**3.06% Amosite 1.02% Chrysotile 4.08% Total**	Not Analyzed	Not Analyzed
P001-BULK013-01-Tar	041732699-0005A	Black	-	-	Not Analyzed	**Inconclusive: <1% Amosite Inconclusive: <1% Chrysotile Inconclusive: <1% Total**	**<1% Amosite <1% Chrysotile <1% Total**
P001-BULK014-01-Insulation	041732699-0006	Gray/White	-	50.00% Non-fibrous (other)	**50.00% Chrysotile**	Not Analyzed	Not Analyzed
P001-BULK014-01-Wrap	041732699-0006A	White	98.00% Cellulose	2.00% Non-fibrous (other)	**None Detected**	Not Analyzed	Not Analyzed
P001-BULK015-01	041732699-0007	Brown/Gray	80.00% Cellulose	14.44% Non-fibrous (other)	**4.17% Amosite 1.39% Chrysotile 5.56% Total**	Not Analyzed	Not Analyzed
P001-BULK016-01	041732699-0008	Gray/White	90.00% Glass	10.00% Non-fibrous (other)	**None Detected**	Not Analyzed	Not Analyzed

ASBESTOS DATA FOR BULK

Project: TechCity Site
Sampling Date: November 9, 2017

PLM NYS Method 198.1 - Friable, PLM NYS Method 198.6 NOB, and TEM NYS Method 198.4 NOB							
Client Sample ID Number	Laboratory Sample ID Number	Color	Non-Asbestos		Asbestos PLM NYS 198.1 Friable	Asbestos PLM NYS 198.6 NOB	Asbestos TEM NYS 198.4 NOB
			Fibrous	Non-Fibrous			
P001-BULK017-01	041732699-0009	White	-	42.90% Non-fibrous (other)	**57.10% Amosite <1% Chrysotile 57.10% Total**	Not Analyzed	Not Analyzed
P001-BULK018-01	041732699-0010	White/Silver/ Yellow	27.6% Min. Wool	-	Not Analyzed	**Inconclusive: None Detected**	**None Detected**

NOB - non –friable organically bound

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 858-4960

November 30, 2017

Smita Sumbaly
Weston Solutions, Inc.
1090 King Georges Post Road, Suite 201
Edison, NJ 08837
732-585-4400
s.sumbaly@westonsolutions.com

Re: PLM NYS ELAP 198.1, PLM NYS ELAP 198.6, and TEM NYS ELAP 198.4; EMSL Order: 041732699; RFP #472

Dear Smita:

On November 10, 2017, EMSL Analytical, Inc. in Cinnaminson, NJ received ten (10) bulk samples for asbestos content analysis via PLM NYS ELAP 198.1 or PLM NYS ELAP 198.6 with conditional TEM NYS ELAP 198.4 analysis. The samples were received via FedEx and were logged in following normal lab procedures. The samples were received under Chain of Custody No. 2-110917-0010-0042-0002 from Weston Solutions, Inc.

PLM NYS ELAP 198.1

All friable bulk samples were analyzed via Polarized Light Microscopy (PLM) using the procedures from the PLM NYS ELAP 198.1 method. All data was reported on a percent asbestos basis with a limit of quantification for the PLM NYS ELAP 198.1 method (stratified point count/400 point count) as <1%. Per this method, any sample found to contain asbestos was subject to a stratified point count.

PLM NYS ELAP 198.6

All non-friable bulk samples were analyzed via Polarized Light Microscopy (PLM) using the gravimetric reduction procedures from the PLM NYS ELAP 198.6 method. All data was reported on a percent asbestos basis with a limit of quantification for the PLM NYS ELAP 198.6 method (stratified point count) as <1%. Per this method, any sample found to contain asbestos was subject to a stratified point count.

TEM NYS ELAP 198.4

Any non-friable bulk samples with results of "None Detected" or <1% asbestos as determined by PLM NYS ELAP 198.6 were analyzed via TEM using the procedures from the TEM NYS ELAP 198.4 NOB method. All data was reported on a % asbestos basis with a limit of quantification for this method of <1%.

QC Performed

One inter-analyst QC was completed via PLM NYS ELAP 198.6 with acceptable results. One intra-analyst QC analysis was completed via TEM NYS ELAP 198.4 with acceptable results. Also, one lab blank was analyzed via PLM NYS ELAP 198.6 and TEM NYS ELAP 198.4 with no asbestos detected. All QC was performed in compliance with EMSL's Quality Assurance Manual.

EMSL ANALYTICAL, INC.

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 858-4960

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. In addition, I certify, that to the best of my knowledge and belief, the data as reported are true and accurate. Release of the data contained in this data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Darrah Johnson-McDaniel
Assistant Asbestos Laboratory Manager
EMSL Cinnaminson, NJ

2. Tabulated Sample Results

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com cinnaslab@EMSL.com

EMSL Order:	041732699
CustomerID:	RFWE53
CustomerPO:	RFP#472
ProjectID:	RFP 472

Attn: **Michael Mannino**
Weston Solutions (King Georges Post)
1090 King Georges Post Road
Suite 201
Edison, NJ 08837

Project: RFP #472

Phone:	(732) 585-4400
Fax:	
Received:	11/10/17 7:15 PM
Analysis Date:	11/19/2017
Collected:	11/9/2017

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID P001-BULK009-01 *041732699-0001*		**Description** BULK009 **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	11/19/2017	Gray/White/Y	98.00% Glass	2.00% Non-fibrous (other)	None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID P001-BULK010-01 *041732699-0002*		**Description** BULK010 **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	11/19/2017	Brown/White	8.00% Cellulose 20.00% Glass	72.00% Non-fibrous (other)	None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID P001-BULK011-01 *041732699-0003*		**Description** BULK011 **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	11/19/2017	White		55.60% Non-fibrous (other)	33.30% Amosite 11.10% Chrysotile 44.40% Total
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID P001-BULK012-01 *041732699-0004*		**Description** BULK012 **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable					Not Analyzed
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB	11/19/2017	Gray/White	11.8% Min. Wool		Inconclusive: None Detected
TEM NYS 198.4 NOB	11/21/2017	Gray/White			None Detected

Initial Report From 11/21/2017 11:02:32

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com cinnaslab@EMSL.com

EMSL Order:	041732699
CustomerID:	RFWE53
CustomerPO:	RFP#472
ProjectID:	RFP 472

Test Report:Asbestos Analysis of Bulk Material

Test		Color	Non Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID P001-BULK013-01 - Insulation *041732699-0005*		**Description** BULK013 **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	11/19/2017	Brown	70.00% Cellulose 15.00% Glass	10.92% Non-fibrous (other)	3.06% Amosite 1.02% Chrysotile 4.08% Total
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID P001-BULK013-01 - Tar *041732699-0005A*		**Description** BULK013 **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable					Not Analyzed
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB	11/19/2017	Black			Inconclusive : <1%Amosite Inconclusive : <1%Chrysotile Inconclusive - <1% Total
TEM NYS 198.4 NOB	11/21/2017	Black			<1% Amosite <1% Chrysotile <1% Total
Sample ID P001-BULK014-01-Insulation *041732699-0006*		**Description** BULK014 **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	11/19/2017	Gray/White		50.00% Non-fibrous (other)	50.00% Chrysotile
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID P001-BULK014-01-Wrap *041732699-0006A*		**Description** BULK014 **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	11/19/2017	White	98.00% Cellulose	2.00% Non-fibrous (other)	None Detected
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed
Sample ID P001-BULK015-01 *041732699-0007*		**Description** BULK015 **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	11/19/2017	Brown/Gray/	80.00% Cellulose	14.44% Non-fibrous (other)	4.17% Amosite 1.39% Chrysotile 5.56% Total
PLM NYS 198.6 VCM					Not Analyzed
PLM NYS 198.6 NOB					Not Analyzed
TEM NYS 198.4 NOB					Not Analyzed

Initial Report From 11/21/2017 11:02:32

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (800) 220-3675 / (856) 786-5974
http://www.EMSL.com cinnaslab@EMSL.com

EMSL Order:	041732699
CustomerID:	RFWE53
CustomerPO:	RFP#472
ProjectID:	RFP 472

Test Report:Asbestos Analysis of Bulk Material

Test			Color	Fibrous	Non-Fibrous	Asbestos
						Non Asbestos
Sample ID	**P001-BULK016-01**		**Description**	**BULK016**		
	041732699-0008		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable		11/19/2017	Gray/White	90.00% Glass	10.00% Non-fibrous (other)	None Detected
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed
Sample ID	**P001-BULK017-01**		**Description**	**BULK017**		
	041732699-0009		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable		11/19/2017	White		42.90% Non-fibrous (other)	57.10% Amosite <1% Chrysotile 57.10% Total
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB						Not Analyzed
TEM NYS 198.4 NOB						Not Analyzed
Sample ID	**P001-BULK018-01**		**Description**	**BULK018**		
	041732699-0010		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable						Not Analyzed
PLM NYS 198.6 VCM						Not Analyzed
PLM NYS 198.6 NOB		11/19/2017	White/Silver/ Yellow	27.6% Min. Wool		Inconclusive: None Detected
TEM NYS 198.4 NOB		11/21/2017	White/Silver/ Yellow			None Detected

Analyst(s)
Matthew Hermann
Ted Young

Benjamin Ellis, Laboratory Manager
or other approved signatory

NOB = Non Friable Organically Bound N/A = Not Applicable VCM = Vermiculite Containing Material

-In New York State, TEM is currently the only method that can be used to determine if NOB materials can be considered or treated as non-asbestos containing.
All samples examined for the presence of vermiculite when analyzed via NYS 198.1.
-NYS Guidelines for Vermiculite containing samples are available at http://www.wadsworth.org/labcert/elapcert/forms/VermiculiteInterimGuidance_Rev070913.pdf
EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples were received in good condition unless otherwise noted.
This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. This report may contain data that is not covered by the NVLAP accreditation.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NYS ELAP 10872, PA ID# 68-00367

Initial Report From 11/21/2017 11:02:32

USEPA
DateShipped: 11/10/2017
CarrierName: Hand Delivered
AirbillNo: NA

CHAIN OF CUSTODY RECORD
RFP Site #: 472
Contact Name: Michael Mannino
Contact Phone: 732-570-4997

No: 2-110917-0010-0042-0002
Lab: EMSL Analytical, Inc.
Lab Address: 200 Route 130 North
Lab Phone: 856-858-4800 x2304

041732699

Lab #	Sample #	Location	Matrix	Sample Date	Sample Time	Numb Cont	Container	Analyses	Preservative	Lab QC
	P001-BULK009-01	BULK009	Asbestos	11/9/2017	11:30	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK010-01	BULK010	Asbestos	11/9/2017	11:35	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK011-01	BULK011	Asbestos	11/9/2017	11:40	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK012-01	BULK012	Asbestos	11/9/2017	11:45	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK013-01	BULK013	Asbestos	11/9/2017	11:50	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK014-01	BULK014	Asbestos	11/9/2017	11:55	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK015-01	BULK015	Asbestos	11/9/2017	12:10	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK016-01	BULK016	Asbestos	11/9/2017	12:20	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK017-01	BULK017	Asbestos	11/9/2017	12:30	1	Poly Bag	Asbestos PLM/TEM	None	N
	P001-BULK018-01	BULK018	Asbestos	11/9/2017	12:45	1	Poly Bag	Asbestos PLM/TEM	None	N

RECEIVED
2017 NOV 10 P 1:19
CINNAMINSON, NJ

Special Instructions: Samples will be analyzed via NYS ELAP PLM Methods 198.1 (friable) and 198.6 (non-friable) and via NYS TEM Method 198.4, if PLM result is <0.1%. TAT: 1 week prelimiary/2 weeks validated. Please send analytical results to S.Sumbaly@WestonSolutions.com, Mike.Mannino@WestonSolutions.com, ben.nwosu@westonsolutions.com

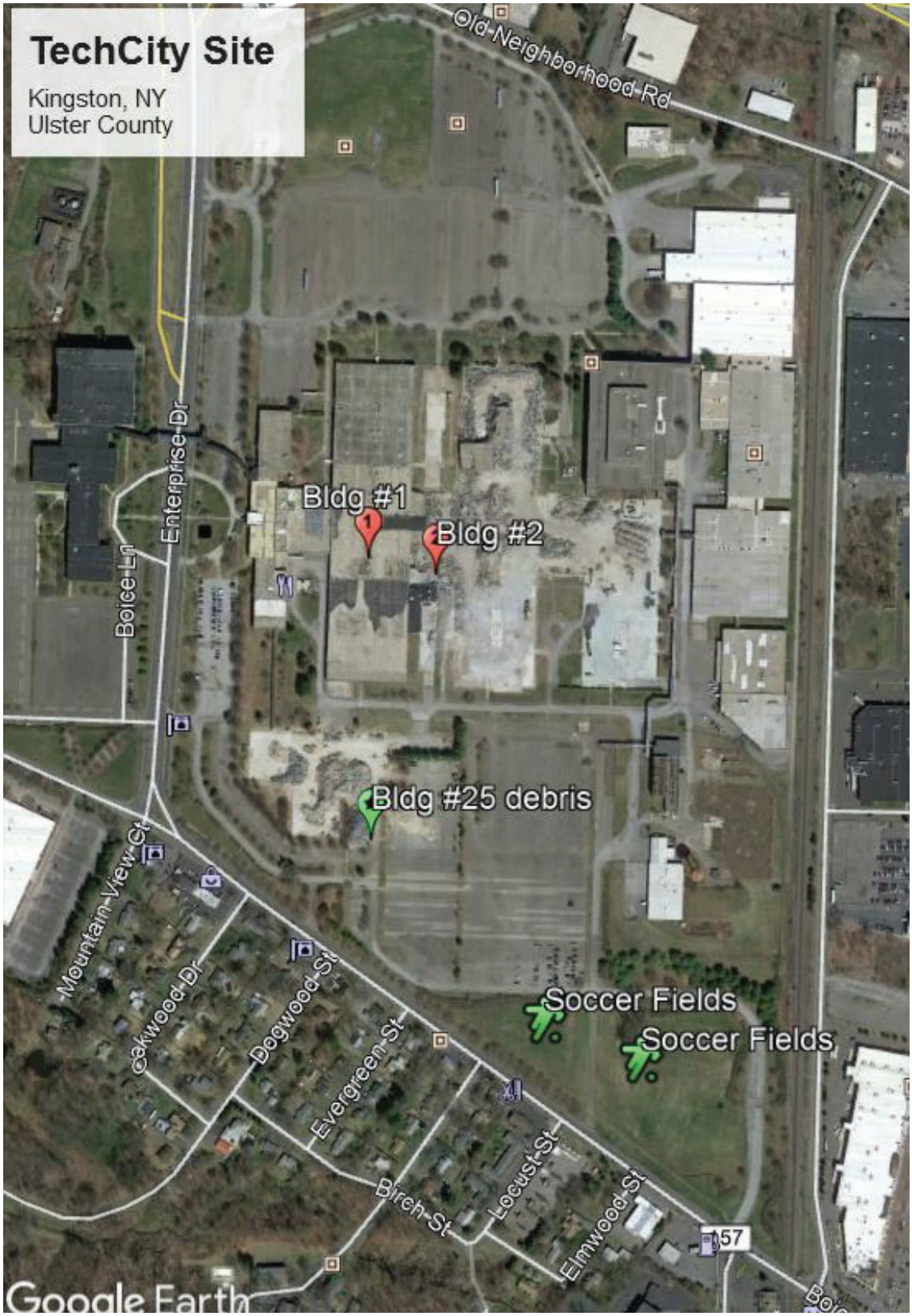
SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	(Weston)	11/10/17 1421		11-10-17, 14:21	
		11-10-17, 19:20	courier	11/10/17 715p	

ORH

FIGURE 1

Site Location Map


TechCity Site
Kingston, NY
Ulster County
Old Neighborhood Rd
Enterprise Dr
Boice Ln
Bldg #1
Bldg #2
Bldg #25 debris
Mountain View Ct
Oakwood Dr
Dogwood St
Evergreen St
Birch St
Locust St
Elmwood St
Soccer Fields
Soccer Fields
57
Google Earth